CLAIMS

What is claimed is:

1.   A method, comprising:

    determining an identity of a speaker through a network over which output data, regarding a person with access to a speech-recognition system receiving the output data, is provided to one or more speech-recognition systems;

    attempting to locate, based on the identity of the speaker, a voice model for the speaker; and

    retrieving from a storage area the voice model for the speaker if the voice model for the speaker is located.

2.   The method of claim 1, wherein the voice model comprises a speaker-dependent voice model.

3.   The method of claim 2, wherein determining the identity of the speaker over the network comprises using information received from the speaker over the network to determine the identity the speaker.

4.   The method of claim 2, wherein determining the identity of the speaker over the network comprises:

    receiving from a device in the network identifying data regarding the speaker; and

    determining the identity of the speaker based on the identifying data regarding the speaker.

1   5.   The method of claim 2, wherein the storage area comprises an internal

2   storage area containing speaker-dependent voice models for multiple persons.

1   6.   The method of claim 2, wherein the storage area comprises an external

2   storage area accessible over the network.

1   7.   The method of claim 2, wherein the output data comprise phonemes.

1   8.   The method of claim 7, further comprising:

2   receiving an utterance from the speaker;

3   using the voice model to extract phonemes from the utterance; and

4   transmitting the phonemes over the network to the speech-recognition system.

1   9.   The method of claim 8, wherein the utterance comprises one or both of

2   vocalized words and vocalized sounds.

1   10.   The method of claim 9, further comprising:

2   receiving from the speech-recognition system contents of a recognized utterance

3   of the speaker; and

4   revising the voice model for the speaker based on the contents of the recognized

5   utterance.

1   11.   The method of claim 2, wherein the output data comprise a voice model

2   for the speaker.

1   12.   The method of claim 11, further comprising transmitting the voice model

2   over the network to the speech-recognition system.

1   13.   The method of claim 2, further comprising

2   receiving Aurora features extracted from an utterance of the speaker;

3   extracting phonemes from the Aurora features; and

4   transmitting the phonemes over the network to a speech recognition system.

1   14.   The method of claim 2, further comprising:

2   retrieving a speaker-independent voice model if failing to locate the voice model

3   for the speaker;

4   receiving an utterance from the speaker;

5   using the speaker-independent voice model to extract phonemes from the

6   utterance;

7   transmitting the phonemes over the network to a speech-recognition system;

1   receiving from the speech-recognition system contents of a recognized utterance

2   of the speaker; and

3   generating a voice model for the speaker based on the contents of the recognized

4   utterance.

1   15.   A method, comprising:

2   accessing by a speaker a network containing a speech recognition system;

3   identifying by a first device the speaker based on information provided by the

4   speaker;

5   requesting by the first device a speaker-dependent voice model for the speaker

6   from a voice model database server providing phonemes to any speech recognition

7   system in the network;

8   retrieving by the voice model database server the speaker-dependent voice model

9   from a storage area if the voice model database server locates a speaker-dependent voice

10   model for the speaker;

11   connecting by the first device the speaking device with the voice model database

12   server;

13   prompting by the voice model database server the speaker to provide an utterance;

14   speaking by the speaker the utterance into the speaking device;

15   receiving by the voice model database server the utterance;

16   using by the voice model database server the speaker-dependent voice model to

17   extract phonemes from the utterance;

18   transmitting by the voice model database server the phonemes over the network to

19   a speech-recognition system; and

20   using by the speech-recognition system the phonemes to determine a content of

21   the utterance.

1   16.   The method of claim 15, wherein the storage area comprises a storage area

2   within the voice model database server containing speaker-dependent voice models for

3   multiple persons.

1   17.   The method of claim 15, wherein the storage area comprises a storage area

2   accessible by the voice model database server over the network.

1   18.   An article of manufacture comprising:

2   a machine-accessible medium including thereon sequences of instructions that,

3   when executed, cause one or more machines to:

4   determine an identity of a speaker through a network over which output data,

5   regarding a person with access to a speech-recognition system receiving the output data,

6   is provided to one or more speech-recognition systems;

7   attempt to locate, based on the identity of the speaker, a voice model for the

8   speaker; and

9   retrieve from a storage area the voice model for the speaker if the voice model for

10   the speaker is located.

1   19.   The article of manufacture of claim 18, wherein the sequences of

2   instructions that, when executed, cause the one or more machines to attempt to locate,

3   based on the identity of the speaker, the voice model for the speaker, comprise sequences

4   of instructions that, when executed, cause the one or more machines to attempt to locate,

5   based on the identity of the speaker, a speaker-dependent voice model for the speaker.

1   20.   The article of manufacture of claim 19, wherein the sequences of

2   instructions that, when executed, cause the one or more machines to retrieve from the

3   storage area the voice model for the speaker if the voice model for the speaker is located

4   comprise sequences of instructions that, when executed, cause the one or more machines

5   to retrieve from an internal storage area containing speaker-dependent voice models for

6   multiple persons the voice model for the speaker if the voice model for the speaker is

7   located.

1   21.   The article of manufacture of claim 19, wherein the sequences of

2   instructions that, when executed, cause the one or more machines to retrieve from the

3   storage area the voice model for the speaker if the voice model for the speaker is located

4   comprise sequences of instructions that, when executed, cause the one or more machines

5   to retrieve from an external storage area accessible over the network the voice model for

6   the speaker.

1   22.   The article of manufacture of claim 19, wherein the sequences of

2   instructions that, when executed, cause the one or more machines to determine the

3   identity of the speaker through the network over which the output data, regarding the

4   person with access to the speech-recognition system receiving the output data, is

5   provided to the one or more speech-recognition systems comprise sequences of

6   instructions that, when executed, cause the one or more machines to determine the

7   identity of the speaker through the network over which phonemes to the one or more

8   speech-recognition systems is provided regarding the person with access to the speech-

9   recognition system receiving phonemes.

1   23.   The article of manufacture of claim 22, wherein the machine-accessible

2   medium further comprises sequences of instructions that, when executed, cause the one

3   or more machines to:

4   receive an utterance from the speaker;

5   use the voice model to extract phonemes from the utterance; and

6   transmit the phonemes over the network to a speech-recognition system.

1   24.   The article of manufacture of claim 23, wherein the machine-accessible

2   medium further comprises sequences of instructions that, when executed, cause the one

3   or more machines to:

4   receive from a speech-recognition system contents of a recognized utterance of

5   the speaker; and

6   revise the voice model for the speaker based on the contents of the recognized

7   utterance.

1   25.   The article of manufacture of claim 19, wherein the sequences of

2   instructions that, when executed, cause the one or more machines to determine the

3   identity of the speaker through the network over which the output data, regarding the

4   person with access to the speech-recognition system receiving the output data, is

5   provided to the one or more speech-recognition systems comprise sequences of

6 instructions that, when executed, cause the one or more machines to determine the

7 identity of the speaker through the network over which the voice model regarding the

8 person to the one or more speech-recognition systems is provided regarding the person

9 with access to the speech-recognition system receiving the voice model regarding the

10 person.

1   26.   The method of claim 19, wherein the machine-accessible medium further

2 comprises sequences of instructions that, when executed, cause the one or more machines

3 to transmit the voice model over the network to a speech-recognition system.

1   27.   The article of manufacture of claim 26, wherein the machine-accessible

2 medium further comprises sequences of instructions that, when executed, cause the one

3 or more machines to:

4   retrieve a speaker-independent voice model if failing to locate the voice model for

5 the speaker;

6   receive an utterance from the speaker;

7   use the speaker-independent voice model to extract phonemes from the utterance;

8   transmit the phonemes over the network to a speech-recognition system;

1   receive from the speech-recognition system contents of a recognized utterance of

2 the speaker; and

3   generate a voice model for the speaker based on the contents of the recognized

4 utterance.

1   28.   An apparatus, comprising:

2   an identification determiner to determine an identification of a speaker through a

3   network over which output data, regarding a person with access to a speech-recognition

4   system receiving the output data, is provided to one or more speech-recognition systems;

5   a voice-model locator to locate a speaker-dependent voice model for the speaker

6   based on the identity of the speaker; and

7   a voice-model retriever to retrieve the speaker-dependent voice model for the

8   speaker from a storage area based on the identity of the speaker.

1   29.   The apparatus of claim 28, further comprising:

2   an utterance receiver to receive an utterance from the speaker;

3   a phoneme extractor to extract phonemes from the utterance using the speaker-

4   dependent voice model; and

5   a phoneme transmitter to transmit the phonemes over the network to a speech-

6   recognition system.

1   30.   The apparatus of claim 26, further comprising:

2   a recognized-utterance receiver to receive from a speech-recognition system

3   contents of a recognized utterance of the speaker; and

4   a voice model reviser to revise the speaker-dependent voice model of the speaker

5   based on the contents of the recognized utterance.